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09/751,934	12/29/2000	James Neal Richter	RNOT.80303	8042
5251	7590	05/17/2005	EXAMINER	
SHOOK, HARDY & BACON LLP 2555 GRAND BLVD KANSAS CITY,, MO 64108			CHEN, TE Y	
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			2161	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

09/751,934

Applicant(s)

RICHTER ET AL.

Examiner

Susan Y. Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-12 and 14-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-12, 14-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. <u>5/12/05</u> |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                 |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

This is in response to amendment filed on 12/06/2005.

Claims 1-2, 4-12 and 14-27 are pending for examination, claims 1, 6, 16 and 18 have been amended; claims 26-27 have been newly added.

A telephone interview has been conducted between the examiner and applicants, to discuss the Double patenting rejection and the 35 U.S.C. 112 rejections. Please refers to the attached interview summary for details.

***Specification***

The amendment filed 12/06/2004 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

At the Title "NON-PROBABILISTIC KNOWLEDGE NETWORKS".

Applicant is required to cancel the new matter in the reply to this Office Action.

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11

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F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 23-25, are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 7 of U.S. Patent No. 6,842,748. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claims 23-25 of the present application merely repeat the features of claims 1 and 7 of US Patent No. 6,842,748 with fewer limitations. However, it is obvious for an ordinary skilled person in the art at the time the invention was made to remove limitations from the claims for the purpose to extend a more broader intentional usage for his/hers invention.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 12, 16 and 18, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject

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matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claims 12, 16 and 18, the claimed "non-probabilistic network" is new matter that is not disclosed in the original filed specification.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 12, 16 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 12, 16 and 18, it is not understood what does it meant by "non-probabilistic Network" (i.e., since applicant's specification fails to define what is the claimed "non-probabilistic Network", thus, it renders these claims indistinct).

Because the ambiguous nature of claims 12, 16 and 18, thus, no art rejection will be given to these claims in the instant office action.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 4-11 and 14-15, 17, 19-22 and 26-27, are rejected under 35 U.S.C. 102(e) as being anticipated by Horvitz et al. (U.S. Patent No. 6,182,133).

As to claims 1 and 26, Horvitz et al. (hereinafter referred as Horvitz) discloses a method as claimed by applicant, comprising:

- a) detecting an access of first information item [e.g., 80, Fig. 1; Fig. 16 and associated text];
- b) detecting an access of a second informational item [e.g., 30, Fig. 1; Fig(s) 6 and associated text];
- c) applying an ensemble of clustering algorithms to the combination of said first informational item and said second informational item [e.g., col. 43, lines 14-16];
- d) establishing that a relationship link exists between said first informational item and second informational item [e.g., col. 1, lines 53-59]; and

e) determining a non-probabilistic (i.e., integer) weight for the relationship link, said weight proportional to the historical frequency of the selection of the combination of informational items [e.g., the simple rank ordering of URLs at col. 4, lines 20-47].

As to claim 2, except all the features recited in claim 1 above, Horvits further discloses that the step of detecting the second informational item includes the detecting of a plurality of informational items [e.g., col. 4, lines 20-30].

As to claims 4 and 27, except all the features recited in claim 2 above, Horvits further discloses that the step of applying an algorithm for data aging wherein the usage of the relationship link is monitored and used as feed back for the weight associated with the relationship link [e.g., col. 5, lines 38-52]; wherein, the data aging runs as a function of traffic load to age the relationship links according to relevance of the relationship links [e.g., Fig.(s) 17A-C and associated texts].

As to claims 5-6, except all the features recited in claim 4 above, Horvits further discloses that the step of applying a repeatedly pruning algorithm wherein external information regarding the usefulness of at least one relationship link is utilized to modify the existence of a recorded relationship link and determine if a recorded relationship link should be removed [e.g., the refinement processing at col. 4, lines 50-62; col. 5, lines 11-18; lines 55-60].

As to claim 7, except all the features recited in claim 5 above, Horvits further discloses that the step of applying said pruning algorithm makes use of a user determined feedback of the usefulness of a relationship [e.g., col. 28, lines 3-22].

As to claim 8, except all the features recited in claim 2 above, Horvits further discloses that said ensemble includes a plurality of algorithms and wherein said relationship link is weighted in direct proportion to the number of algorithms within said ensemble of algorithms that determine the existence of said relationship link [e.g., col. 32, line 63 – col. 33, line 14; Fig. 11A-11B and associated texts].

As to claim 9, except all the features recited in claim 2 above, Horvits further discloses that said relationship link is positioned in a list in direct proportion to the degree of consensus among said ensemble of algorithms [e.g., col. 10, lines 47-61].

As to claim 10, except all the features recited in claim 2 above, Horvits further discloses that said ensemble includes a plurality of algorithms and each of said algorithms runs independently of all other algorithms [e.g., col. 11, lines 6-12].

As to claim 11, except all the features recited in claim 2 above, Horvits further discloses that the step of merging the outputs of said ensemble of algorithms [e.g., col. 12, lines 1-20, Fig. 2 and associated texts].



As to claims 14-15, 17, 19, 20-22, these claims recited the same features as claims 1-11 in form of computer apparatus or a readable storage medium product, hence are rejected for the same reason.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Zellweger (U.S. Patent No. 5,630,125).

Zellweger disclosed a system having method as claimed by applicant, including:

a) recursively determining (or reexamining) an efficient path for a particular help item (or a subsequent help item) of interest, based on the context in which the help item (or subsequent help item) is sought [Abstract, Improving Menu Access, col. 8, line 65 - col. 9, line 56, Fig. 8 and associated texts]; and

b) dynamically changing and storing the context as well as path in which a help item (or a subsequent help item) is sought by any subsequent user [col. 5, lines 5-17; col. 7, lines 1-5; col. 8, lines 4-34, 50-62; for example, see the logical flow,

configuration, browsing, bookmark, and file distribution processing of Fig(s). 7-8,13-15 and associated texts].

### ***Response to Arguments***

Applicant's arguments filed on 12/06/2004 have been fully considered but they are not persuasive.

The examiner disagrees with applicant's argument that "Applicants' invention does not employ a probabilistic network, but rather, a weighted or deterministic/non-probabilistic network..."

In reply to this argument, the examiner points out that in the original filed specification, applicants specifically disclose the followings:

"Also, in accordance with the principles of the present invention, the extraction of textual database fields; the application of multiple text classification algorithms; the merging of the algorithm results; the encoding of the merged results as a Bayesian-type link..." [page 4, lines 1-3];

"FIG. 4A is a flow diagram showing an exemplary embodiment of the related clustering merge and output to a Bayesian-type Network method in accordance with the principles of the present invention" [page 5, line 9-11];

"the present invention incorporates a Bayesian-type Belief Network, which includes a set of random Frequently Asked Questions(FAQ) or Data, a set of relationships between nodes, a weight which describes the strength of relationship between each node, and a network structure which allows cycles and other structures with no limitations. Generally, as shown in FIG. 3, in step 301, the textual data relating to informational items are first extracted. A number of independent algorithms in steps 302A-302D, are applied to the two or more extracted informational items to determine the existence, if any, of a relationship link between the items. It should be noted that the number of individual algorithms 302 is open ended that is, there can be anywhere from 1 to N algorithms applied for the purpose of finding a relationship link. The output of the algorithms are first merged in step 303, and then fed into a Bayesian-type Knowledge Network in step 304. The merging of the algorithm outputs in step 303, initially serves the purpose of allowing a certain weight or strength value to be associated with a particular relationship link. The weight or strength assigned to a particular link is directly proportional to the total number of individual algorithms at step 302A-302D that determine the existence of a relationship link between individual informational items. A second purpose of the merged algorithm outputs is to enable the creation of a Bayesian-type link within a database. When a link has been created, the usefulness and relevance of the link must be periodically checked and updated in order to prevent wasteful storage and processing."

Wherein, the above specification clearly teaches that the instant invention incorporates a Bayesian-type Belief Network, which includes a set of random FAQ or

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Data,.. there can be anywhere from 1 to N algorithms applied for the purpose of finding a relationship link of these data. The output of the algorithms are first merged in step 303, and then fed into a Bayesian-type Knowledge Network in step 304. The merging of the algorithm outputs in step 303, initially serves the purpose of allowing a certain weight or strength value to be associated with a particular relationship link. Furthermore, the natural of a Bayesian-type Belief Network as admitted by Applicants includes a set of random variables that make up the nodes of network, and a conditional probability associated with each node to quantify the effect that parents have on a node and a directed acyclic graphic i.e. a graph with non directed cycles [see Page 11, lines 13-17], thus, base on the above discussion, the argument recited by applicant that "Applicants invention does not employ a probabilistic network, but rather, a weighted or deterministic/non-probabilistic network" is clearly contradicts with the original filed specification.

As to the rest of arguments, which are either based on the unsupported non-probabilistic network processing, or rehash issues already address on records, as such, the examiner maintains her rejection position for the instant invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Y. Chen whose telephone number is 571-272-4016. The examiner can normally be reached on Monday - Friday from 7:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan Y Chen  
Examiner  
Art Unit 2161

May 12, 2005

  
**UYEN LE**  
**PRIMARY EXAMINER**